



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,417	07/19/2001	Masahiro Yatake	U 013559-6	7288
140	7590	08/22/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023				SHOSHO, CALLIE E
ART UNIT		PAPER NUMBER		
		1714		

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/909,417	YATAKE, MASAHIRO
	Examiner Callie E. Shosho	Art Unit 1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 June 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 4-8,11,12,15-17 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 4-8,11,12,15-17 and 20-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 6/5/06. It is noted that the double patenting rejection of record is overcome by applicant's filing of proper terminal disclaimer on 6/5/06.

It is noted that applicant did not include claim 23 in the listing of claims filed 6/5/06. It is not clear if the claim is cancelled or pending. It is advised that in applicants' response to the present office action, the status of claim 23 is set forth. Given that claim 23 was not included in the listing of claims, the claim is considered cancelled and thus, has not been rejected in the rejections set forth below. It is noted that if claim 23 were pending (status is "previously presented"), the claim would have been rejected by the prior art cited in paragraph 3 below.

**Claim Rejections - 35 USC § 103**

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 4-5, 7-8, 11-12, 15, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yui et al. (U.S. 5,948,155) in view of WO 00/22056.

The rejection is adequately set forth in paragraph 8 of the office action mailed 12/2/05 and is incorporated here by reference.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yui et al. in view of WO 00/22056 as applied to claims 4-5, 7-8, 11-12, 15, and 20-22 above, and further in view of *Introduction to Physical Polymer Science*.

The rejection is adequately set forth in paragraph 9 of the office action mailed 12/2/05 and is incorporated here by reference.

5. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yui et al. in view of WO 00/22056 as applied to claims 4-5, 7-8, 11-12, 15, and 20-22 above, and further in view of EP 978547.

The rejection is adequately set forth in paragraph 8 of the office action mailed 12/2/05 and is incorporated here by reference.

#### Response to Arguments

6. Applicant's arguments filed 6/5/06 have been fully considered but they are not persuasive.

Specifically, applicant argues that there is no motivation to combine Yui et al. with WO 00/22056 (Hayashi) given that the primary object of Yui et al. is to provide ink with long term stability and given that it is known in the art that penetrating agents such as diethylene glycol monobutyl ether as disclosed by WO 00/22056 adversely affect storage stability. As evidence to support this position, applicant points to Miyabayashi (U.S. 6,864,302) which discloses the use of penetrant such as diethylene glycol monobutyl ether in ink comprising pigment results in

pigment that is liable to suffer from unstable dispersability in some cases when the ink is stored for long period of time.

However, firstly, it is noted that the ink disclosed by Miyabayashi as exhibiting adverse effects when penetrant such as diethylene glycol monobutyl ether is utilized appear to be inks comprising pigment and dispersant (col.2, lines 53-60). However, Yui et al. disclose ink comprising self-dispersing pigment that does not require dispersant. There is no evidence that the use of penetrant in ink comprising self-dispersing pigment such as that disclosed by Yui et al. would also result in pigment that suffers from unstable dispersability during storage for long periods of time as disclosed by Miyabayashi.

Further, Miyabayashi discloses that adverse effects due to the use of penetrant occurs only "in some cases". There is no disclosure that the use of penetrant would adversely affect all inks. Thus, there is no evidence that the use of penetrant adversely affects the storage stability of all inks including ink disclosed by Yui et al.

Additionally, it is noted that col.25, lines 6-9 of Miyabayashi discloses the use of glycol ethers such as diethylene glycol monobutyl ether while col.3, line 65 of Miyabayashi discloses that the ink has excellent storage stability. Thus, it appears that inks can in fact contain diethylene glycol monobutyl ether and still possess excellent storage stability. Further evidence to support this position is found in Uemura et al. (U.S. 6,451,103). Attention is called to Table 2 of Uemura et al. that discloses inks (examples 4 and 5) containing diethylene glycol monobutyl ether that have good storage stability. In light of the disclosures of Miyabayashi and Uemura et al., it is clear that inks possessing diethylene glycol monobutyl ether can still possess good storage stability.

Thus, given that Miyabayashi discloses that adverse effects of penetrating agent on storage stability occurs only “in some cases”, given that Miyabayashi discloses that ink comprising pigment and dispersant are adversely effected by penetrating agent and not ink comprising self-dispersing pigment as disclosed by Yui et al., given that there is no evidence that the use of penetrating agent such as diethylene glycol monobutyl ether in the ink of Yui et al. would adversely effect the storage stability, and given the disclosures in Miyabayashi and Uemura et al. that ink comprising diethylene glycol monobutyl ether does still possess good storage stability, it is the examiner’s position that the combination of Yui et al. with WO 00/22056 remains relevant against the present claims.

**Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DE 19844004 discloses surfactant mixture comprising alkyl olioglycoside and fatty alcohol ethoxylated used in cleaning and cosmetic products, however, there is no disclosure of ink as presently claimed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Callie Shosho*  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
8/17/06